

## Configure Logical Logs

End Result:

- 2 GB llogdbs01 dbspace
- 16 131064 KB logical logs created in llogdbs01 dbspace
- Remove 6 logical logs created during initialization

1. Temporarily set LTAPEDEV to /dev/null and bounce the engine

```
informix> vi $INFORMIXDIR/etc/$ONCONFIG
```

```
LTAPEDEV /dev/null
```

```
informix> onmode -k
```

```
informix> oninit -v
```

2. Create a new dbspace called lgspace1 to hold the new logical logs

```
informix> touch /home/informix/chunks/LLOGDBS11.01
```

```
informix> chown informix:informix /home/informix/chunks/LLOGDBS11.01
```

```
informix> chmod 660 /home/informix/chunks/LLOGDBS11.01
```

```
informix> onspaces -c -d lgspace1 -p /home/informix/chunks/LLOGDBS11.01 -o 0 -s 2097152
```

3. Make logical log 4 the current logical log and put the last checkpoint in logical log 4

Execute **onmode -l** multiple times until the output for logical log 4 in **onstat -l** shows 'C' in flags

```
informix> onmode -l # repeat as necessary
```

```
informix> onmode -c
```

4. Drop logical logs 1, 2 and 3

```
informix> onparams -d -l 1 -y
```

```
informix> onparams -d -l 2 -y
```

```
informix> onparams -d -l 3 -y
```

5. Create 3 new logical logs

```
informix> onparams -a -d lgspace1 -s 131064
```

```
informix> onparams -a -d lgspace1 -s 131064
```

```
informix> onparams -a -d lgspace1 -s 131064
```

6. Move the current logical log and last checkpoint out of logical logs 4, 5 and 6

```
informix> onmode -l
```

```
informix> onmode -l
```

```
informix> onmode -l
```

```
informix> onmode -c
```

7. Drop logical logs 4, 5 and 6

```
informix> onparams -d -l 4 -y  
informix> onparams -d -l 5 -y  
informix> onparams -d -l 6 -y
```

8. Create logical logs 4 through 16

```
informix> onparams -a -d lgspace1 -s 131064 # repeat 12 times
```

### **Configure System Backups to a Directory**

End Result: System Backups written to /home/informix/backup/system

1. Create a directory to hold the System Backups

```
informix> mkdir /home/informix/backup  
informix> mkdir /home/informix/backup/system  
informix> chmod 770 /home/informix/backup/system
```

2. Change ONCONFIG TAPEDEV parameter to new backup directory

```
informix> vi $INFORMIXDIR/etc/$ONCONFIG  
  
TAPEDEV /home/informix/backup/system
```

3. Optionally compress System Backups

```
informix> vi $INFORMIXDIR/etc/$ONCONFIG  
  
BACKUP_FILTER /bin/gzip  
RESTORE_FILTER /bin/gunzip
```

4. Take a Level 0 System Backup

```
informix> ontape -s -L 0
```

### **Configure Automatic Logical Log Backup to a Directory**

End Result: Automatic Logical Log backups written to /home/informix/backup/llog

1. Create a directory to hold the Logical Log backups

```
informix> mkdir /home/informix/backup/llog
informix> chmod 770 /home/informix/backup/llog
```

2. Change ONCONFIG LTAPEDEV parameter to new backup directory

```
informix> vi $INFORMIXDIR/etc/$ONCONFIG

LTAPEDEV /home/informix/backup/llog
```

3. Optionally change ONCONFIG LTAPESIZE parameter if backup and restore filters are used

```
informix> vi $INFORMIXDIR/etc/$ONCONFIG

LTAPESIZE 2097152
```

4. Modify \$INFORMIXDIR/etc/alarmprogram.sh to enable automatic logical log backups with ontape

```
informix> vi $INFORMIXDIR/etc/alarmprogram.sh

# line 31, change flag from N to Y
BACKUPLOGS=Y

# line 62, change onbar -b -l to ontape -a -d
BACKUP_CMD="ontape -a -d"
```

5. Test by forcing a logical log switch

```
informix> onmode -l
```

All used logical logs except for the current logical log should be backed up. Verify by checking for a flag of '**B**' in **onstat -l** output, monitoring the Informix log via **onstat -m** and checking the logical log backup directory for logical log backups.

## Restoring from System Backup and Applying the Logical Log backups

End Result: Informix engine restored to most recent point in time available

1. Verify the engine is offline

```
informix> onstat -
shared memory not initialized for INFORMIXSERVER 'blogsvr01'
```

2. Verify chunks required for restore exist, recreate using touch command if necessary

```
informix> ls -l /home/informix/chunks

total 4194312
```

```
-rw-rw---- 1 informix informix 2147483648 2010-07-26 12:35 LLOGDBS01.01
-rw-rw---- 1 informix informix 2147483648 2010-07-26 12:35 ROOTDBS.01

informix> touch /home/informix/chunks/DATADBS01.01 # assuming we need a chunk named DATADBS01.01 and it
does not exist
informix> chmod 660 /home/informix/chunks/DATADBS01.01
informix> ls -l /home/informix/chunks
total 4194312
-rw-rw---- 1 informix informix      0 2010-07-26 12:38 DATADBS01.01
-rw-rw---- 1 informix informix 2147483648 2010-07-26 12:35 LLOGDBS01.01
-rw-rw---- 1 informix informix 2147483648 2010-07-26 12:35 ROOTDBS.01
```

3. Execute a ontape restore from directory

```
informix> ontape -r -d
```

4. Bring the engine into Multi-User mode from Quiescent mode

```
informix> onmode -m
```